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09/822,832	04/02/2001	Bangalore S. Manjunath	Q59548	8468

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EXAMINER

HAMILTON, MONPLAISIR G

ART UNIT	PAPER NUMBER
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2172

DATE MAILED: 01/23/2004

19

Please find below and/or attached an Office communication concerning this application or proceeding.

7

Supplemental Office Action Summary	Application No.	Applicant(s)	
	09/822,832	MANJUNATH ET AL.	
	Examiner	Art Unit	
	Monplaisir G Hamilton	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 38-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.


JEAN M. CORRIELLUS
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 18
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Supplemental DETAILED ACTION

1. Claims 1-37 remain for examination.

Information Disclosure Statement

2. The information disclosure statements (IDSs) submitted on 4/28/03 and 11/20/03 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Response to Arguments

3. Applicant's arguments, see Paper No 15, filed 9/22/03, with respect to the rejections of claims 1-26 and 28-32 under 35 U.S.C 102(e) as being anticipated by US 6430553 issued to Ferret, claims 33 and 34 under under 35 U.S.C. 103(a) as being unpatentable over US 6430553 issued to Ferret in view of US 6463430 issued to Brady et al and claims 35-37 under 35 U.S.C. 103(a) as being unpatentable over US 6430553 issued to Ferret in view of US 5903892 issued to Hoffert et al, have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

Claim Rejections - 35 USC § 112

4. Claim 31 recites the limitation "the parser" in line 1. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith.

Referring to Claim 1:

Smith discloses a database building method for multimedia contents, the method comprising the steps of: accessing an arbitrary site providing multimedia contents through a telecommunication network (page 85, Section 2.1, lines 1-5); calling multimedia contents in by spidering (page 85, Section 2.1, lines 1-5); and classifying the multimedia contents data according to stored addresses and storing the multimedia contents data in a predetermined database (page 85, Section 1.1, lines 1-4; page 86-88).

Referring to Claim 2:

Smith discloses the limitations as discussed in Claim 1 above. Smith further discloses the multimedia contents data is image data (page 85, Section 2.1, lines 5-10).

Referring to Claim 3:

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Smith discloses the limitations as discussed in Claim 1 above. Smith further discloses the stored addresses are universal resource locators (URLS) (page 85, Section 2.1, lines 5-10).

Referring to Claim 13:

Smith discloses the limitations as discussed in Claim 3 above. Smith further discloses the URL of a web page storing the called multimedia contents is stored in the predetermined database using the URL information (Section 3.1.2, lines 1-5; Section 3.4, lines 1-8).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 26 and 28-29 and 31-32 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6643641 issued to Snyder herein referred to as Snyder.

Referring to Claim 26:

Snyder discloses a database building apparatus for multimedia contents comprising: a web visitor for accessing an arbitrary site providing multimedia contents and calling the multimedia contents by spidering the arbitrary site (col 6, lines 30-40); and a database for

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classifying and storing the called multimedia contents using a categorized structure of a database of the arbitrary site (col 6, lines 30-50) or using addresses storing the called multimedia contents data (col 9, lines 65-15).

Referring to Claim 28:

Snyder discloses the limitations as discussed in Claim 26 above. Snyder further discloses the multimedia contents data is image data (col, 9, lines 5-30; col 10, lines 15-25).

Referring to Claim 29:

Snyder discloses the limitations as discussed in Claim 26 above. Snyder further discloses a filtering unit for filtering noise images out of the called image data to get filtered image (col 25, lines 5-55).

Referring to Claim 31:

Snyder discloses the limitations as discussed in Claim 28 above. Snyder further discloses the parser parses keywords representing characteristics of a file name of the multimedia contents (cp; 7, lines 45-60; col 10, lines 3-10).

Referring to Claim 32:

Snyder discloses the limitations as discussed in Claim 28 above. Snyder further discloses a resolution decreasing unit for decreasing resolution of the filtered image (col 18, lines 5-15;).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder.

Referring to Claim 4:

Smith discloses the limitations as discussed in Claim 1 above.

Smith does not explicitly disclose "arbitrary site is selected between a retrieval site or a portal site".

Snyder discloses the limitations as discussed in Claim 1 above. Ferret further discloses the arbitrary site is selected between a retrieval site or a portal site (col 12, lines 13-55).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Smith such that the spider spiders retrieval or portal sites. One of ordinary skill in the art would have been motivated to do this because it would allow the system to access more content for indexing.

Referring to Claim 12:

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Smith in view of Snyder discloses the limitations as discussed in Claim 4 above. Smith further discloses decreasing the resolution of the called multimedia contents if the multimedia content is an image and storing the image of which resolution was decreased in the predetermined database according to a categorized structure (Section 2.1.1, lines 1-5).

8. Claims 5-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder further in view of Authoritative Sources in a Hyperlinked Environment by Jon M. Kleinberg, herein referred to as Kleinberg.

Referring to Claim 5:

Smith in view Snyder of discloses the limitations as discussed in Claim 4 above.

Smith in view of Snyder do not explicitly disclose step (b) further comprises the sub-steps of: (b-1) inputting a search word; (b-2) parsing texts corresponding to file names of multimedia contents or texts corresponding to sub-categories in hyper text markup language (HTML) web page data having retrieved results from the input search word; and (b-3) calling multimedia contents data having addresses corresponding to the parsed texts.

Kleinberg discloses (b-1) inputting a search word (Section 2.1, lines 25-30); (b-2) parsing texts corresponding to file names of multimedia contents or texts corresponding to sub-categories in hyper text markup language (HTML) web page data having retrieved results from the input

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search word (Section 2.1, lines 45-65); and (b-3) calling multimedia contents data having addresses corresponding to the parsed texts (Section 2.1, lines 45-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Smith in view of Snyder to retrieve sites to be spidered by first issuing a query to limit the number of sites that will be spidered. One of ordinary skill in the art would have been motivated to do this because it would decrease the computations needed during the spidering process (Kleinberg: Section 2.1, lines 12-15).

Referring to Claim 6:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 5 above. Kleinberg further discloses visiting a corresponding category when the texts corresponding to the sub-category are parsed in a loaded HTML web page data (Section 2.1, lines 45-65).

Referring to Claim 8:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 5 above. Smith further discloses the called multimedia contents data is called image data (Section 1.1, lines 2-5).

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Referring to Claim 9:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 8 above. Snyder further discloses filtering noise images out of the called image data to get a filtered image (col 14, lines 10-22).

9. Claims 7 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder and Authoritative Sources in a Hyperlinked Environment by Jon M. Kleinberg, herein referred to as Kleinberg further in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi et al.

Referring to Claim 7:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 5 above.

Smith and Snyder further in view of Kleinberg do not explicitly disclose “keywords representing characteristics of the texts corresponding to the sub-categories together with the texts corresponding to the file names of the multimedia contents are parsed in loaded HTML web page data”.

Attardi discloses keywords representing characteristics of the texts corresponding to the sub-categories together with the texts corresponding to the file names of the multimedia contents are parsed in loaded HTML web page data (Section 4.1, lines 1-10).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Smith and Snyder further in view of Kleinberg such that keywords found in the document are parsed for indexing. One of ordinary skill in the art would have been motivated to do this because it would allow the system to determine where the URL or image should be categorized (Attardi: Section 4.2, lines 1-5).

Referring to Claim 14:

Smith and Snyder in view of Kleinberg further in view of Attardi disclose the limitations as discussed in Claim 7 above. Smith further discloses at least one of URL information or keyword information together with information on respective images is stored in respective predetermined databases so that keywords can be linked to individual images (Section 3.1.1-Section 3.4, lines 1-8).

10. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over An Image and Video Search Engine for the World-Wide Web by Smith et al, herein referred to as Smith in view of US 6643641 issued to Snyder, herein referred to as Snyder and Authoritative Sources in a Hyperlinked Environment by Jon M. Kleinberg, herein referred to as Kleinberg further in view of US 6564202 issued to Schuetze et al, herein referred to as Schuetze.

Referring to Claim 10:

Smith and Snyder further in view of Kleinberg disclose the limitations as discussed in Claim 9 above.

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Smith and Snyder further in view of Kleinberg do not explicitly disclose "determining whether or not a pixel number of the filtered image is equal to or greater than a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater than the predetermined threshold value."

Schuetze discloses determining whether or not a pixel number of the filtered image is equal to or greater than a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater than the predetermined threshold value (col 25, lines 1-9).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Smith and Snyder further in view of Kleinberg to reject images below a certain threshold. One of ordinary skill in the art would have been motivated to do this because it would prevent the index from including uninteresting images (col 24, lines 63-68).

Referring to Claim 11:

Smith and Snyder in view of Kleinberg further in view of Schuetze disclose the limitations as discussed in Claim 10 above. Schuetze further discloses the predetermined threshold value is 10,000 (col 8, lines 35-40).

Schuetze does not explicitly disclose the predetermined threshold value is 128. However, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to lower this value to 128. One of ordinary skill in the art would have been motivated to do this because it would allow a lower rejection rate (col 25, lines 3-5)

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11. Claims 15-20 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6271840 issued Finseth et al, herein Finseth in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi.

Referring to Claim 15:

Finseth discloses a database building method for multimedia contents, the method comprising the steps of: accessing an arbitrary site providing multimedia contents using a database having a categorized structure (col 4, lines 25-40); calling multimedia contents data by spidering the arbitrary site (col 4, lines 55-60).

Finseth does not explicitly disclose “storing the called multimedia contents data to a predetermined database, using the categorized structure.”

Attardi discloses storing the called multimedia contents data to a predetermined database, using the categorized structure (Section 4.1, lines 13-15; Section 4.2, lines 1-5; Section 6, lines 4-10).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Finseth storing the called multimedia contents data to a predetermined database, using the categorized structure. One of ordinary skill in the art would have been motivated to do this because it would (Section 6, lines 4-10).

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Referring to Claim 16:

Finseth in view of Attardi discloses the limitations as discussed in Claim 15 above.

Finseth further discloses the multimedia contents data is image data (page 85, Section 2.1, lines 5-10).

Referring to Claim 17:

Finseth in view of Attardi discloses the limitations in Claim 15 above. Attardi further discloses step (b) further comprising the sub-steps of (b-1) loading root HTML web page data from the arbitrary site (Section 4.1, lines 1-4); (b-2) parsing texts corresponding to a sub-category or corresponding to file names of multimedia contents in the loaded HTML web page data (Section 4.1, lines 4-10); and (b-3) calling multimedia contents data of addresses corresponding to the parsed texts (Section 4.1, lines 4-10; Section 4.1, lines 16-19).

Referring to Claim 18:

Finseth in view of Attardi discloses the limitations in Claim 17 above. Attardi further discloses before the step (b-3), visiting the corresponding sub-category of step (b-2) when texts corresponding to the sub-category are parsed in the loaded HTML web page data (Section 4.1, lines 16-19).

Referring to Claim 19:

Finseth in view of Attardi discloses the limitations in Claim 17 above. Attardi further discloses in step (b-2), keywords representing characteristics of the text corresponding to the

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subcategory or the texts corresponding to the file names of multimedia contents are parsed (Section 4.1, lines 3-6).

Referring to Claim 20:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Finseth further discloses (b-4) after step (b-3), filtering noise images out of the called image data to get filtered images (col 5, lines 30-60).

Referring to Claim 23:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Finseth further discloses decreasing the resolution of the called multimedia contents if the multimedia content is an image and storing the image of which resolution was decreased in the predetermined database according to a categorized structure (col 5, lines 50-60; col 6, lines 5-10).

Referring to Claim 24:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Attardi further discloses a URL of a web page storing the called multimedia contents is stored in the predetermined database, using the categorized structure (Section 4.2, lines 1-5).

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Referring to Claim 25:

Finseth in view of Attardi discloses the limitations in Claim 16 above. Attardi further discloses at least one of category information and keyword information, together with information of individual images, is stored in respective predetermined databases (Section 4.2, lines 1-5).

12. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6271840 issued Finseth et al, herein Finseth in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi further in view of US 6564202 issued to Schuetze et al, herein referred to as Schuetze.

Referring to Claim 21:

Finseth in view of Attardi discloses the limitations in Claim 16 above.

Finseth in view of Attardi do not explicitly disclose "(b-4-1) determining whether or not a pixel number of the filtered images is equal to or greater that a predetermined threshold value; and (b-4-2) when the pixel number of the filtered image is equal or greater that the predetermined threshold value, indexing the corresponding image"

Schuetze discloses determining whether or not a pixel number of the filtered image is equal to or greater that a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater that the predetermined threshold value (col 25, lines 1-9).

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At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Finseth in view of Attardi to reject images below a certain threshold. One of ordinary skill in the art would have been motivated to do this because it would prevent the index from including uninteresting images (col 24, lines 63-68).

Referring to Claim 22:

Finseth in view of Attardi further in view of Schuetze disclose the limitations as discussed in Claim 21 above. Schuetze further discloses the predetermined threshold value is 10,000 (col 8, lines 35-40).

Schuetze does not explicitly discloses the predetermined threshold value is 128 . However, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to lower this value to 128. One of ordinary skill in the art would have been motivated to do this because it would allow a lower rejection rate (col 25, lines 3-5).

13. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of Automatic Web Page Categorization by Link and Context Analysis by Attardi

Referring to Claim 27:

Snyder discloses the limitations as discussed in Claim 26 above. Snyder further discloses the web visitor selects and visits arbitrary retrieval sites, loads root HTML web page data from

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the arbitrary retrieval sites (col 22, line 65-col 23, line 5); hierarch ally visits other web pages or sites linked to the loaded HTML web page data (col 23, lines 1-10).

Snyder does not explicitly disclose "visits a corresponding sub-category after texts corresponding to the sub-category are parsed in the loaded HTML web page data; and having addresses corresponding to the pared texts corresponding to the sub-category".

Attardi discloses visiting a corresponding sub-category after texts corresponding to the sub-category are parsed in the loaded HTML web page data; and having addresses corresponding to the pared texts corresponding to the sub-category (Section 4.1, lines 1-16; Section 6, lines 1-8).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Attardi such that a sub-category is visited and parsed. One of ordinary skill in the art would have been motivated to do this because it would allow the parser to index information contained in a web Catalogue (Section 4.1, lines 10-16)

14, Claims 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of US 6564202 issued to Schuetze et al, herein referred to as Schuetze.

Referring to Claim 30:

Snyder discloses the limitations in Claim 29 above.

Snyder do not explicitly disclose "the filtering unit determining whether or not a pixel number of the filtered images is equal to or greater that a predetermined threshold value; and

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when the pixel number of the filtered image is equal or greater than the predetermined threshold value, indexing the corresponding image”

Schuetze discloses the filtering unit determining whether or not a pixel number of the filtered image is equal to or greater than a predetermined threshold value; and indexing the corresponding image when the pixel number of the filtered image is equal or greater than the predetermined threshold value (col 25, lines 1-9).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Snyder to reject images below a certain threshold. One of ordinary skill in the art would have been motivated to do this because it would prevent the index from including uninteresting images (col 24, lines 63-68).

15. Claims 33-34 rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of US 6108620 issued to Richardson et al.

Referring to Claim 33:

Snyder discloses the limitations as discussed in Claim 26 above.

Snyder does not explicitly disclose “a control unit for outputting a control signal, wherein it is determined whether or not a number of indexed multimedia contents is equal to or greater than a predetermined number, and when the number of indexed multimedia contents is equal to or greater than the predetermined number, the control signal has a first predetermined logic level

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and when the indexed multimedia contents is less than the predetermined number, the control signal has a second predetermined logic level.”

Richardson discloses a control unit for outputting a control signal, wherein it is determined whether or not a number of indexed multimedia contents is equal to or greater than a predetermined number, and when the number of indexed multimedia contents is equal to or greater than the predetermined number, the control signal has a first predetermined logic level and when the indexed multimedia contents is less than the predetermined number, the control signal has a second predetermined logic level (col 2, lines 55-65).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Snyder such that a logic signal about the number of indexed materials can be used to decide whether or not to continue parsing. One of ordinary skill in the art would have been motivated to do this because it would allow the indexing method to stop when memory is depleted (col2, lines 55-65).

Referring to Claim 34:

Snyder in view of Richardson discloses the limitations as discussed in Claim 33 above. Richardson further discloses responding to the control signal having the first predetermined logic level, a parser finishes parsing, and responding to the control signal having the second predetermined logic level, the parser parses text corresponding to the addresses of other web pages or sites linked to HTML web page data (col 2, lines 55-65).

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16. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6643641 issued to Snyder herein referred to as Snyder in view of US 5903892 issued to Hoffert et al, herein referred to as Hoffert.

Referring to Claim 35:

Snyder discloses the limitations as discussed in Claim 26 above.

Snyder does not explicitly disclose “a first database for storing category information; a second database for storing URL information; a third database for storing lists of keywords; and a fourth database for storing multimedia contents indexed by information stored in the first database, second database, and third database.”

Hoffert a first database for storing category information; a second database for storing URL information; a third database for storing lists of keywords; and a fourth database for storing multimedia contents indexed by information stored in the first database, second database, and third database (col 6, lines 20-40).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the teaching of Snyder such that information is stored in multiple databases. One of ordinary skill in the art would have been motivated to do this because it would allow quick and efficient access to the data.

Referring to Claim 36:

Snyder in view of Hoffert discloses the limitations as discussed in Claim 35 above.

Hoffert further discloses the fourth database stores information on URLs storing indexed

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multimedia contents using information stored in the first database second database and third database (col 7, lines 50-65; col 8, lines 15-25).

Referring to Claim 37:

Snyder in view of Hoffert discloses the limitations as discussed in Claim 35 above.

Hoffert further discloses the multimedia contents stored in the fourth database are thumbnails of original images, which are generated by decreasing resolution of the original image (col 7, lines 60-65; col 20, lines 1-40).

Prior Art

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6643661 issued to Polizzi, Kathleen Riddell et al. Polizzi discloses Limits 910 are used to prevent the crawler from infinitely indexing sites, which have deep links. Some of the limits which may be defined for a crawler include a maximum depth (which specifies how many levels of links a crawler may follow), a site duration (which defines the number of hours a crawler should spend on any given site), a page delay (which defines the number of seconds the crawler should wait after downloading a page before moving to the next link of set of links), and a page timeout (which defines the number of seconds that the crawler will wait to receive data after requesting a page).

US 6263364 issued to Najork, Marc Alexander et al. Najork discloses given a set of URL's, the web crawler 102 enqueues the URL's into appropriate queues 128. Multiple threads 130 are used to dequeue URL's out of the queues 128, to download the corresponding documents or web pages from the World Wide Web and to extract any new URL's from the downloaded documents. Any new URL's are enqueued into the queues 128. This process repeats indefinitely or until a predetermined stop condition occurs, such as when all URL's in the queues have been processed and thus all the queues are empty. In continuous web crawler embodiments, there is no such stop condition. Multiple threads 130 are used to simultaneously enqueue and dequeue URL's from multiple queues 128. During the described process, the operating system 120 executes an Internet access procedure 122 to access hosts on the network through the communications interface 104.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is 1703-305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on 1703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1703-305-3900.

Monplaisir Hamilton


JEAN M. CORRIELLUS
PRIMARY EXAMINER